

MS ISSUE FEE PATENT 1173-1035PUS2

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant:

Brian R. Murphy et al.

Group:

1648

Application No.:

09/083,793

Examiner:

Stacy Brown Chen

Filed:

May 22, 1998

Conf.:

4558

For:

PRODUCTION OF ATTENUATED PARAINFLUENZA VIRUS VACCINES

FROM CLONED NUCLEOTIDE SEQUENCES

LETTER REQUESTING INITIALED PTO 1449 FORM

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In reviewing the above-captioned application file upon allowance, the undersigned has noted that even though acknowledgement was received for the PTO Form 1449 filed on January 28, 1999, the Examiner did not initial the references under "Foreign Patent Documents". No reason was given as to why these references were not initialed.

A copy of the partly initialed form is attached. The Patent and Trademark Office therefore is requested to return the completely initialed form to the undersigned as soon as possible.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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DRN/LTP/jd Enclosure

NOOV 1 4 2006 Attorney Docket Serial No. FORM PTO-1449 (Modified 09/083,793 17634-000320 LIST OF PATENTS AND Applicants PUBLICATIONS FOR APPLACANTE Brian R. Murphy et al. INFORMATION DISCLOSURE STATEMENT Tiling Date May 22, 1998 Group . 1643 REFERENCE DESIGNATION TRADES U.S. PATENTS Sub-Examiner Class Class Name * Document No. Date Initial 435 235.1 Wertz et al. 02/10/98 nM AA 5,716,821 235.1 435 08/04/98 Wertz et al. AB 5,789,229 FOREIGN PATENT DOCUMENTS Class Trans-Examiner lation? Date Country Document No. Initial C12N 02/20/97 PCT AC WO 97/06270 C07K 03/27/97 PCT AD WO 97/11093 PCT A01N 06/12/97 WO 97/20468 AE C12N 0 440 219 A1 08/07/91 Europe AF C12N 03/20/96 Europe AG 0 702 085 A1 OTHER ART (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.) Belshe et al., "Cold Adaptation of Parainfluenza Virus AΗ Type 3: Induction of Three Phenotypic Markers, " J. Med. Virol. 10:235-42 (1982). Blumberg et al., "Measles Virus L Protein Evidences AΙ Elements of Ancestral RNA Polymerase, "Virology 164:487-497 (1988). Collins et al., "Parainfluenza Viruses," Fields Virology ΑJ 3rd ed., Lippincott-Raven Publishers, Philadelphia 1205-1241, (1996). Collins et al., "Production of infectious human AΚ respiratory syncytial virus from cloned cDNA confirms an essential role for the transcription elongation factor from the 5' proximal open reading frame of the M2 mRNA in gene expression and provides a capability for vaccine development, " Proc. Natl. Acad. Sci. USA 92:11563-11567, 1995. DATE CONSIDERED EXAMINER |

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to Applicant.

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NOV 1 4 20 Attorney Docket Na Serial No. FORM PTO-1449 (Modified) 09/083,793 17634-000320 PATENTS AND Applicants ions of a pricant's PUBLIC Brian R. Murphy et al. INFORMATION DISCLASURE Group Filing Date 1643 May 22, 1998 (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.) Conzelmann, "Genetic manipulation of non-segmented ALnegative-strand RNA viruses, " J. Gen. Virol. 77:381-89 Cook et al., "In Vivo antigenic Studies of Parainfluenza ΑM Viruses, " Amer. Jour. Hyg. 77:150, 1963. Cook et al., "Antigenic Relationships Among the "Newer" AN Myxoviruses (Parainfluenza), " Amer. Jour. Hyg. 69:250, 1959. Dimock and Collins, "Rescue of Synthetic Analogs of ΑO Genomic RNA and Replicative-Intermediate RNA of Human Parainfluenza Virus Type 3, " J. Virol.: 2772-2778, 1993. Durbin et al., "Recovery of Infectious Human Parainfluenza AΡ Virus Type 3 from cDNA, " Virology 235:323-332, 1997. Durbin et al., "Minimum protein Requirements for ΑO Transcription and RNA Replication of a Minigenome of Human Parainfluenza Virus Type 3 and Evaluation of the Rule of Six," <u>Virology</u> 234:74-78 (1997). Flexner al., "Prevention of vaccinia virus infection in *I* 'R immunodericient mice by vector-directed IL-2 expression," Nature 33:259-262, 1987. Frank et al. "Comparison of Different Tissue Cultures for AS Isolation and Quantitation of Influenza and Parainfluenza Viruses, " J. Clin. Microbiol. 10:32-6 (1979). Fuerst et al., "Eukaryotic transient-expression system AT based on recombinant vaccinia virus that synthesizes bacteriophage T7 RNA polymerase, " Proc. Natl. Acad. Sci. USA 83:8122-8126, 1986. DATE CONSIDERED EXAMINER

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FORM PTO-14			Attorney Docket No. 17634-000320 Nov 14 2006	Serial No. 09/083,793
LIST OF PATENTS AND PUBLICATION DISCLOSURE			Applicants Brian R. Murphy et Chapanage	
OINFORMATION DISCLOSURE		EMENT	Filing Date May 22, 1998	Group 1643
OTHER	ART	(INCLUDING AUTH	OR, TITLE, DATE, PERTINENT PAGES, ETC.)	
MAI	AU	of the Human p	., "Molecular cloning and Se parainfluenza 3 Virus Gene En plogy <u>165</u> : 499-510, (1988).	quence Analysis coding the L
	AV	Galinski et al., "RNA Editing in the Phosphoprotein Gene of the Human Parainfluenza Virus Type 3," <u>Virology 186</u> : 543-50 (1992).		
	AW	Garcin et al., "A highly recombinogenic system for the recovery of infectious Sendai paramyxovirus from cDNA: generation of a novel copy-back nondefective interfering virus," EMBO J. 14(24):6087-6094 (1995).		
	AX	Grosfeld et al., "RNA Replication by Respiratory Syncytial Virus (RSV) Is Directed by the N, P, and L Proteins; Transcription Also Occurs under These Conditions but Requires RSV Superinfection for Efficient Synthesis of Full-Length mRNA," J. Virol. 69: 5677-5686 (1995).		
	AY	Hall et al., "Cold-passaged human parainfluenza type 3 viruses contain ts and non-ts mutations leading to attenuation in rhesus monkeys," <u>Virus Res. 22</u> (3):173-184, 1992.		
	AZ	Karron et al., "A Live Attenuated Bovine Parainfluenza Virus Type 3 Vaccine Is Safe, Infectious, Immunogenic, and Phenotypically Stable in Infants and Children," J. Infect. Dis. 171:1107-1114, 1995.		
	BA	Kast et al., "Protection against lethal Sendai virus infection by in vivo priming of virus-specific cytotoxic T lymphocytes with a free synthetic peptide," Proc. Natl.Acad. Sci. USA 88 :2283-2287, 1991.		
	BB	Mutagenesis wi	"Rapid and Efficient Site-S thout Phenotypic Selection," 367-382, (1987).	pecific <u>Methods</u> "
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FORM PTO-1			Attorney Docker No. 17634-000320	Serial No. 09/083,793	
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S PRINT DRMATION DISCLOSURE			Applicants Brian R. Murphy et al.		
STATEMENT			Filing Date May 22, 1998	Group 1643	
OTHER	ART	(INCLUDING AUTH	OR, TITLE, DATE, PERTINENT P	AGES, ETC.)	
M M	вс	Lawson et al., from DNA," <u>Pro</u> (1995).	"Recombinant vesicular stom oc. Natl. Acad. Sci. U.S.A. 9	atitis viruses 2:4477-81	
	BD	Sensitive Infl Interference i	"Failure of Attenuated Tempuenza A (H3N2) Virus to Indun Humans to Parainfluenza Ty_12:62-8, 1975.	ce Heterologous	
	BE	Murphy et al., "Current approaches to the development of vaccines effective against parainfluenza and respiratory syncytial viruses," <u>Virus Res.</u> 11:1-15 (1988).			
	BF	Murphy et al., "Enhanced pulmonary histopathology is observed in cotton rats immunized with formalininactivated respiratory syncytial virus (RSV) or purified F glycoprotein and challenged with RSV 3-6 months after immunization," Vaccine 8(5):497-502, 1990.			
	BG	Palese et al., "Negative-strand RNA viruses: Genetic engineering and application," Proc. Natl. Acad. Sci. U.S.A. 93:11354-58, (1996).			
	ВН	Pelet et al., "The P gene of bovine parainfluenza virus 3 expresses all three reading frames from a single mRNA editing site," EMBO J. 10:443-448 (1991).			
	BI	Radecke et al., "Rescue of measles viruses from cloned DNA," EMBO J. 14:5773-5784 (1995).			
	ВЈ	Ray et al., "Human Parainfluenza virus Induces a Type-Specific Protective Immune Response," <u>J. Infect. Dis.</u> 162:746, 1990.			
	вк	Parainfluenza	Temperature-Sensitive Phenoty virus Type 3 Candidate Vaccith a Defect in the L Gene," J	ne Strain (cp45)	
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LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE		OR ADDITIONT'S	Applicants Brian R. Murphy et		
STATEMENT		EMENT	Filing Date May 22, 1998	Group 1643	
2 THER	ART	(INCLUDING AUTH	OR, TITLE, DATE, PERTINENT P	AGES, ETC.)	
M M	BL	Sakaguchi et al., "Expression of the HN, F, NP and M proteins of Sendai virus by recombinant vaccinia viruses and their contribution to protective immunity against Sendai virus infections in mice," J. Gen. Virol. 74:479-484, 1993.			
	вм	Schnell et al., "Infectious rabies viruses from cloned cDNA," EMBO J. 13:4195-203 (1994).			
	BN	Skiadopoulos et al., "Three Amino Acid Substitutions in the L Protein of the Human Parainfluenza Virus Type 3 cp45 Live Attenuated Vaccine Candidate Contribute to Its Temperature-Sensitive and Attenuation Phenotypes," J. Virol 72(3):1762-1768, 1998.			
	ВО	Spriggs and Collins, "Sequence analysis of the P and C Protein Genes of Human parainfluenza Virus Type 3: Patterns of Amino Acid Sequence Homology among Paramyxovirus Proteins," <u>J. Gen. Virol.</u> 67 2705-2719, (1986).			
	BP	strain of human	s et al., "The complete nucleotide sequence of the JS n of human parainfluenza virus type 3: comparison the Wash/47885/57 prototype strain," Virus Res103 1992.		
	BQ	cold-adapted, vaccine viruses strain and huma	et al "The complete nucleotide sequence of two apted, temperature-sensitive attenuated mutant viruses (cp 12 and cp 45) derived from the JS and human parainfluenza virus type 3 (PIV3)," <u>Virus</u> (1):43-52, 1993.		
	BR	Tanabayashi, K. and Compans, R.W., "Functional Interaction of Paramyxovirus Glycoproteins: identification of a Domain in Sendai Virus HN Which Promotes Cell Fusion," <u>J. Virol.</u> 70:6112-18 (1996).			
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FORM I	PTO-14	149 (Modified	Attorney Docket No. 17634-000320	Serial No. 09/083,793	
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HAL	OTHER	EART	(INCLUDING AUTH	OR, TITLE, DATE, PERTINENT P	AGES, ETC.)	
BS Tao et al., "R Parainfluenza Hemagglutinin-			Parainfluenza Hemagglutinin- Been Replaced	ecovery of a Fully Viable Chimeric Human Virus (PIV) Type 3 in Which the Neuraminidase and Fusion Glycoproteins Have by Those of PIV Type 1," <u>J. Virol. 72</u> :2955-		
		вт	Thomson et al., "Recombinant Polyepitope Vaccines for the Delivery of Multiple CD8 Cytotoxic T Cell Epitopes," <u>J. Immunol. 157</u> :822, 1996.			
		BU	van Wyke Coelingh et al., "Antigenic and Structural Properties of the Hemagglutinin-Neuraminidase glycoprotein of Human Parainfluenza Virus Type 3: Sequence analysis of Variants Selected with Monoclonal antibodies Which Inhibit Infectivity, Hemagglutination, and Neuraminidase Activities," J. Virol. 61:1473-1477, (1987).			
		BV	van Wyke Coelingh et al., "Antigenic Variation in the Hemagglutinin-Neuraminidase Protein of Human Parainfluenza Type 3 Virus," <u>Virology 143</u> (2):569-582, 1985.			
		BW	Whelan et al., "Efficient recovery of infectious vesicular stomatitis virus entirely from cDNA clones," Proc. Natl.Acad. Sci. USA 92:8388-8392 (1995).			
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